# FUJITSU

## Data Sheet Fujitsu PRIMERGY BX900 S1 Blade Server

### The Dynamic Cube

Fujitsu PRIMERGY BX Blade Servers meet all the requirements of medium-sized companies as well as the branches and data centers of large companies, especially with their comprehensive offer of services and solutions. They offer a clever alternative in providing an IT infrastructure with high levels of efficiency, flexibility and business continuity. The PRIMERGY BX system family is designed so that the chassis components can be used throughout the family. This means that changing business requirements can be met quickly and easily. Servers, storage and connection blades can be added without any additional cabling effort or administration software. Its modular design gives the PRIMERGY BX Blade Servers considerable advantages, such as high density as well as reliable and dynamic 24x7 operations. The PRIMERGY BX Blade Servers are the ideal choice for today's and tomorrow's data center solutions where reliability, performance and connectivity are important requirements. They can be used for a wide range of applications, starting with web or terminal servers up to high-performance databases. And as business requirements grow, the PRIMERGY BX Blade Servers can be adapted to meet individual requirements and fulfill such needs in a suitable manner.

### PRIMERGY BX900 S1

The PRIMERGY BX900 the Dynamic Cube is a complete Dynamic Server infrastructure in a single chassis. The Blade Server can be dynamically adapted to various IT requirements: you reduce costs and your IT becomes more flexible. The PRIMERGY BX900 has space for up to 18 server and storage blades in a 10U chassis. This is the leader

in its class for density and multiple application services in a compact form factor. Our innovative and registered Cool-safe<sup>™</sup> cooling concept, combined with 94% efficient, 80Plus Platinum certified power supplies and the embedded ServerView Power Management software, ensures real dynamic power & cooling which helps you to save money. Dual-socket server blades, equipped with the latest CPUs from the Intel® Xeon® processor 5500 and 5600 series, large memory capacity and state-of-the-art I/O performance predestine the PRIMERGY BX900 for every scenario of application virtualization. Quad-socket server blades with the extremely reliable and performant CPUs of the Intel<sup>®</sup> Xeon<sup>®</sup> processor 7500 series extend the range of uses to the operation of business-critical ERP applications and large database management systems. Your investment is protected when your business grows, as up to four BX900 chassis units can be operated in a common management and I/O administration domain.







### Features and Benefits

### Main Features

### **Dynamic Power & Cooling**

■ Using our Cool-safe<sup>™</sup> cooling concept, combined with the new 80Plus Platinum certified power supply units (94% efficiency) and the embedded ServerView Power Management software, it ensures real dynamic power & cooling.

### **Dynamic Virtualization**

Equipped with the Intel<sup>®</sup> Xeon<sup>®</sup> processor 5600 and 7500 series, very large memory capacities and state of the art I/O performance, the PRIMERGY BX900 is optimized for any virtualization scenario on the one hand, and for resource hungry applications on the other hand.

### Dynamic High Availability

Due to its fully redundant design (MMBs, NICs, Fans, PSUs) and in combination with ServerView Resource Coordinator Virtual Edition (RCVE) and the ServerView Resource Orchestrator (ROR), the PRIMERGY BX900 can completely protect itself against any possible failure; at the same time it excels with the fastest automatic recovery, and with an allocation of its available resources to services, according to requirements.

### **Dynamic Scalability**

With space for up to 18 Server Blades, 8 Connection Blades, 6 power supply units and 2 management boards in a 10U high chassis, the PRIMERGY BX900 has the highest density. Combined with chassis interconnectivity the system allows the most flexible scaling.

### Benefits

- Save energy costs
- Easily deploy more or larger virtual and physical machines than ever before and in this way increase your IT performance
- Best availability, most effective server protection and the agility to adapt to changing requirements
- Complete investment protection and flexible growth scenarios.

### Technical details

PRIMERGY BX900 S1			
Housing type	Rack Rack		
Enclosure			
System unit type	10 U chassis for 19-inch rack		
Front bays	18 half height or 9 full height bays for server or storage blades		
Midplane	High speed midplane with 4 redundant fabrics		
Rear bays	8 x for Connection Blades (2 Connection Blades per fabric) 6 x for PSU modules		
Management Blades	1x hot-plug Management Blade as standard, redundant Management Blade as option		
Fan configuration	Up to 3 hot plug, redundant fan modules		
Fan notes	2 fan units per module, 2 x 2 fans per unit; modules either part of PSU modules or independent components		
Power supply configuration	Up to 6x hot-plug power supply module, 3x as minimum configuration (4th to 6th power supply module neccessary for redundancy and depending on system configuration)		
Operating panel			
Operating buttons	On/off switch ID button		
Status LEDs	Power (amber / green) System status (orange) Identification (blue)		
Service display	ServerView Local Service Display for Blade (LSB)		
Management Blade			
Type of Unit	BX900 MMB S1		
LAN / Ethernet (RJ-45)	2 x 1Gb Ethernet		
Service LAN (RJ45)	Dedicated Service LAN port for MMB (1Gb Ethernet)		
Serial 1 (9-pin)	1 x RS-232-C		
USB ports	2 x (at rear side of the system)		
Dimensions / Weight			
Dimensions (W x D x H)	483 mm (Bezel) / 445mm (Body) x 778 x 438		
Height Unit Rack	10 U		
19″ rackmount	Yes		
Weight	Up to 200 kg		
Weight notes	Fully assembled		
	Actual weight may vary depending on configuration		
Rack integration kit	Included		
Electrical values			
Max. input of single power supply	3200 W / 1600 W (240 V / 100 V)		
Rated voltage range	100 V - 240 V		
Rated frequency range	47 Hz - 63 Hz		
Rated current max.	65A / 29A (100 V / 240 V)		
Electrical value notes	Active power max. value depends on system configuration. For details see Power Configuration Tool.		
Environmental			
Operating ambient temperature	5 - 35°C		
Operating relative humidity	10 - 85 % (non condensing)		
Operating environment	FTS 04230 Guideline for Data Center (installation locations)		
Operating environment Link	http://docs.ts.fujitsu.com/dl.aspx?id=e4813edf-4a27-461a-8184-983092c12dbe		
Noise emission	Measured according to ISO 7779 and declared according to ISO 9296		

Environmental	
Sound pressure (LpAm)	up to 64 dB(A) (operating)
Sound power (LWAd; 1B = 10dB)	86dB (operating)
Compliance	
Germany	20
Еигоре	CE Class A *
USA/Canada	CSAc/us
	ULc/us
	FCC Class A
Global	СВ
	RoHS
	WEEE
Japan	VCCI Class A + JIS 61000-3-2
Australia/New Zealand	C-Tick
Taiwan	BSMI
Compliance notes	There is general compliance with the safety requirements of all European countries and North America. National approvals required in order to satisfy statutory regulations or for other reasons can be applied for on request. * Warning:
	This is a class A product. In a domestic environment this product may cause radio interference in which case the use may be required to take adequate measures.
Compliance link	http://sp.ts.fujitsu.com/sites/certificates/

Product Model name	Product Type	Processor quantity support	Max. number per BX unit	Memory slots total	Supported capacity RAM (max.)
PRIMERGY BX920 S2	Dual Socket Server Blade (Intel) http://docs.ts.fujitsu.com/dl.aspx		18 19b-ad1c-91f78c9f93	9 3e7	288 GB
PRIMERGY BX922 S2	Dual Socket Server Blade (Intel) http://docs.ts.fujitsu.com/dl.asp×		18 422b-aa87-a62dfeb7	12 914c	192 GB
PRIMERGY BX924 S2	Dual Socket Server Blade (Intel) http://docs.ts.fujitsu.com/dl.asp×		18 4cfb-83f5-f791be689	18 94a	384 GB
PRIMERGY BX960 S1	Quad Socket Server Blade (Intel) http://docs.ts.fujitsu.com/dl.aspx		9 a40-9cf4-29ca90e08	32 c24	512 GB
PRIMERGY SX910 S1	Storage Blade Tape http://docs.ts.fujitsu.com/dl.aspx	?id=cc5ba5c8-2c98-4	6 647-b585-db5890f9	243c	
PRIMERGY SX940 S1	Storage Blade Disk http://docs.ts.fujitsu.com/dl.aspx	?id=cabbdb01-8a40-	6 44dd-af4d-50bc074c	0ec8	
PRIMERGY SX960 S1	Storage Blade Disk http://docs.ts.fujitsu.com/dl.aspx	?id=489d2a0c-81f1-4	2 4d3e-aaa3-df55ac446	5930	
PRIMERGY SX980 S1	Storage Blade Disk http://docs.ts.fujitsu.com/dl.aspx	?id=b4de3482-a07c	6 4cda-8f9c-de4e3869	291b	

Connection type	Down-link ports	Up-link ports	Max. number per BX unit
Eth Pass Thru 10Gb 18/18	18 x 1/10 Gb Eth	18 x 1/10 Gb (SFP/SFP+/Twinax)	6 (CD Clab 1/2 2/4 5/6)
Eth Switch/IBP 10Gb 18/8	18 x 10 Gb Eth	8 x 10 Gb (SFP+)	(CB Slot 1/2 3/4 5/6) 6
Eth Switch/IBP 1Gb 18/6	18 x 1 Gb Eth	6 x 1 Gb (RJ45)	(CB Slot 1/2 3/4 5/6) 8
			(CB Slot 1/2 3/4 5/6 7/8)
Eth Switch/IBP 1Gb 36/12	36 x 1 Gb Eth	8 x 1 Gb (RJ45), 4 x 1 Gb (SFP)	8 (CB Slot 1/2 3/4 5/6 7/8)
Eth Switch/IBP 1Gb 36/8+2	36 x 1 Gb Eth	8 x 1 Gb (RJ45) , 2 x 10 Gb (SFP+)	8 (CB Slot 1/2 3/4 5/6 7/8)
FC Pass Thru 8Gb 18/18	18 x 8 Gb FC	18 x 4/8 Gb (SFP/SFP+)	4 (CB Slot 3/4 5/6)
FC Switch 8Gb Brocade 14 Port	18 x 8 Gb FC	8 x 4/8 Gb (SFP/SFP+)	4 (CB Slot 3/4 5/6)

Connection type	Down-link ports	Up-link ports	Max. number per BX unit
FC Switch 8Gb Brocade 26 Port	18 x 8 Gb FC	8 x 4/8 Gb (SFP/SFP+)	4 (CB Slot 3/4 5/6)
FC Switch 8Gb Brocade 26 Port Enterprise	18 x 8 Gb FC	8 x 4/8 Gb (SFP/SFP+)	4 (CB Slot 3/4 5/6)
IB Switch 40Gb 18/18	18 x 40 Gb IB	18 x 40 Gb (QSFP)	3 (CB Slot 3/4 5/6 7/8)
SAS Switch 6Gb 18/6	18 x 6 Gb SAS	6 x 6 Gb SAS	1 (CB Slot 5)

warranty		
Standard Warranty	3 years	
Service level	On-site Service (depending on country)	
Maintenance and Support Servi	ces - the perfect extension	
Recommended Service	7x24, Onsite Response Time: 4h - For locations outside of EMEA please contact your local Fujitsu partner.	
Service Lifecycle	5 years	
Service Weblink	http://ts.fujitsu.com/Supportservice	

### More information

### Fujitsu platform solutions

In addition to Fujitsu PRIMERGY BX900 S1, Fujitsu provides a range of platform solutions. They combine reliable Fujitsu products with the best in services, know-how and worldwide partnerships.

#### **Dynamic Infrastructures**

With the Fujitsu Dynamic Infrastructures approach, Fujitsu offers a full portfolio of IT products, solutions and services, ranging from clients to datacenter solutions, Managed Infrastructure and Infrastructure as-a-Service. How much you benefit from Fujitsu technologies and services depends on the level of cooperation you choose. This takes IT flexibility and efficiency to the next level.

### **Computing Products**

http://de.fujitsu.com/it\_trends/dynamic\_ infrastructures/products/index.html

### Software

www.fujitsu.com/software/

#### More information

Learn more about Fujitsu PRIMERGY BX900 S1, please contact your Fujitsu sales

representative or Fujitsu Business partner, or visit our website.

http://ts.fujitsu.com/Primergy

### Fujitsu green policy innovation

Fujitsu Green Policy Innovation is our worldwide project for reducing burdens on the environment.

Using our global know-how, we aim to resolve issues of environmental energy efficiency through IT.

Please find further information at http://www. fujitsu.com/global/about/environment/



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